



City of San Jose Community Risk Reduction Plan

Second Public Workshop

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Bay Area Air Quality Management District

Overview

- Background: Community Air Risk Evaluation (CARE) for the S.F. Bay Area
- Updates to Bay Area Air District's California Environmental Quality Act (CEQA) air quality guidelines
- Community Risk Reduction Plan (CRRP)

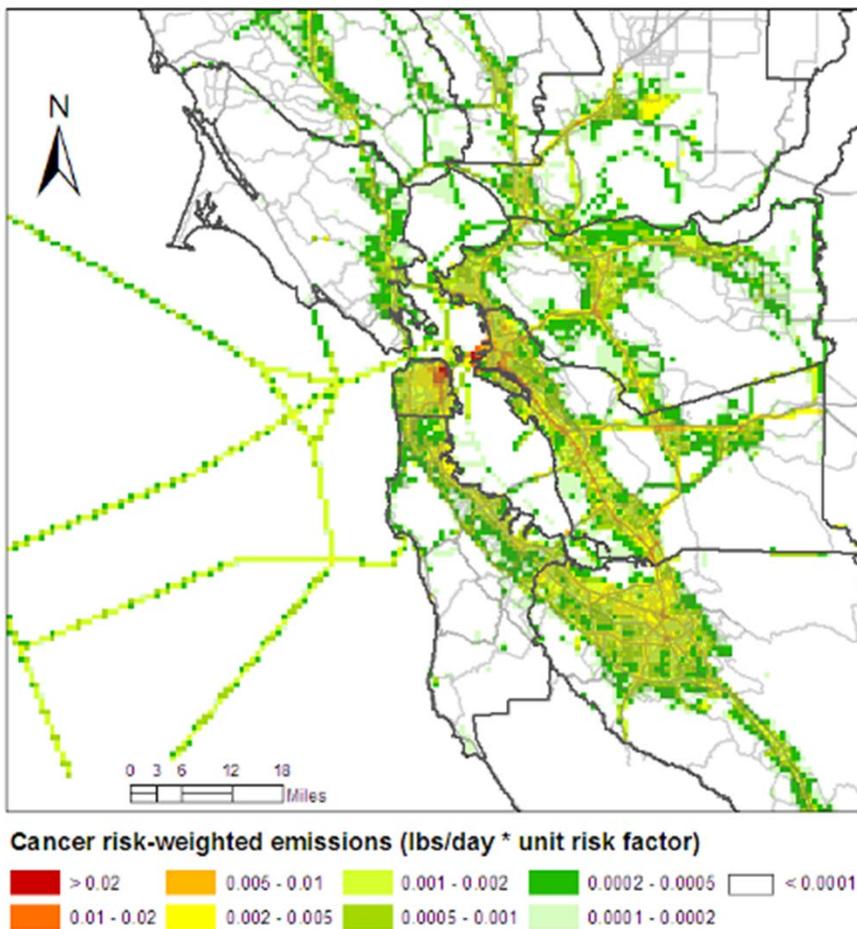
Community Air Risk Evaluation (CARE) Program

- Evaluate regional and community cancer and non-cancer health risks from toxic air contaminants
 - Supplements long-standing programs to reduce regional smog (ozone, particles)
- Identify sensitive populations
- Focus health risk mitigation measures on locations with higher risk levels and sensitive populations

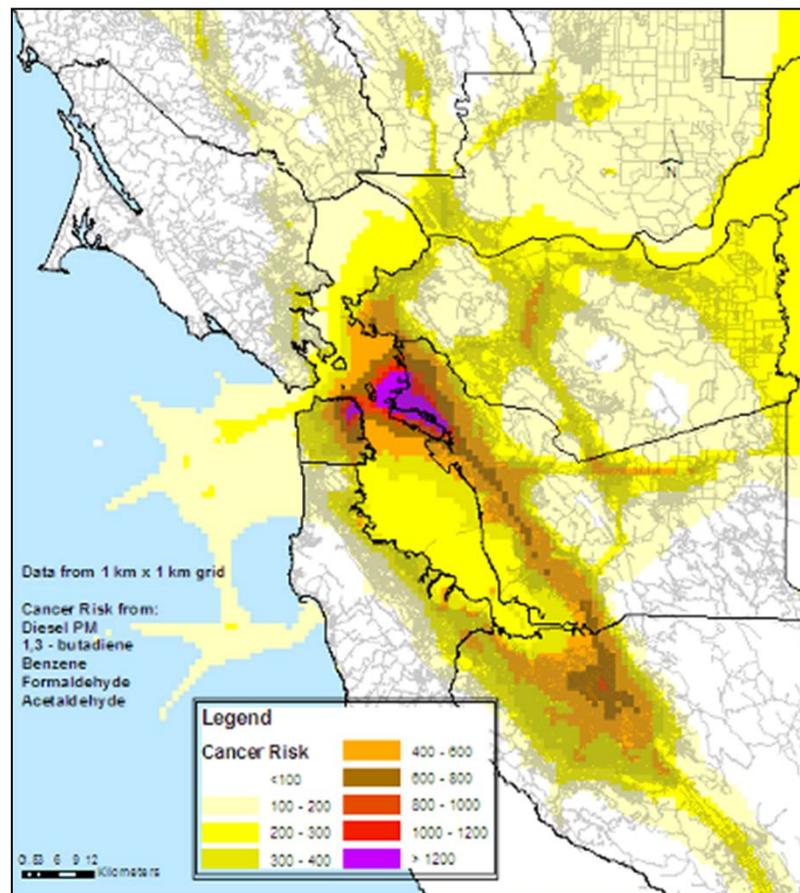


Emissions and Modeled Air Toxics (2005)

Risk-weighted Emissions

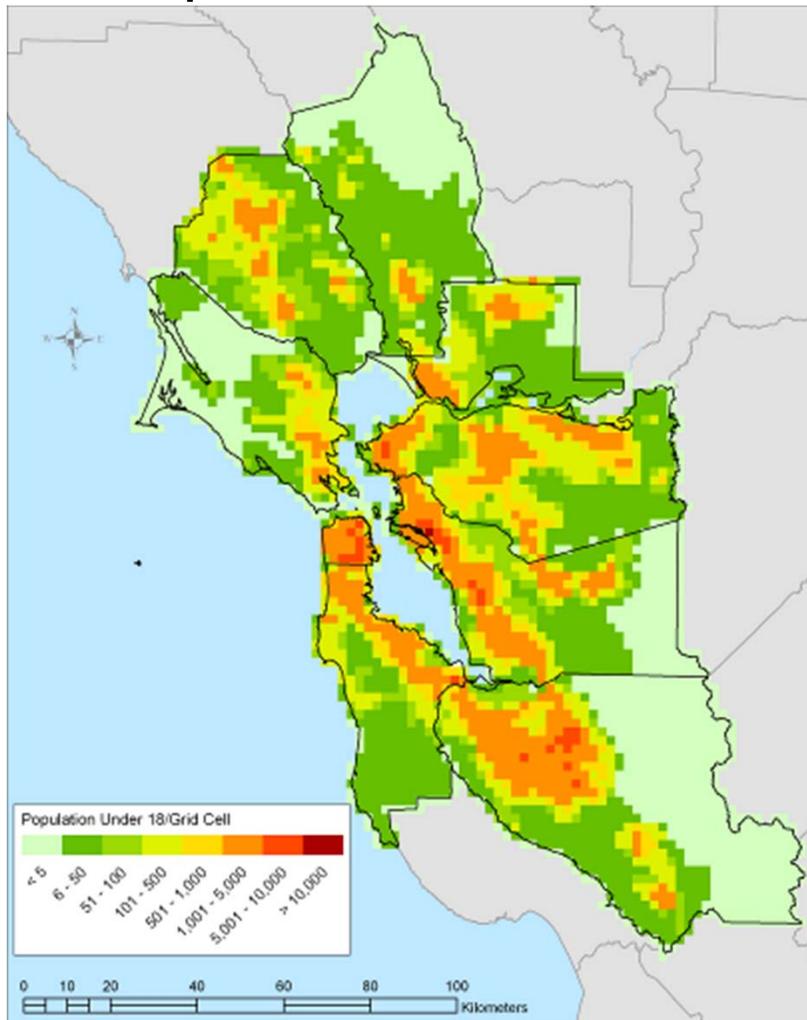


Modeled Air Toxics Risk

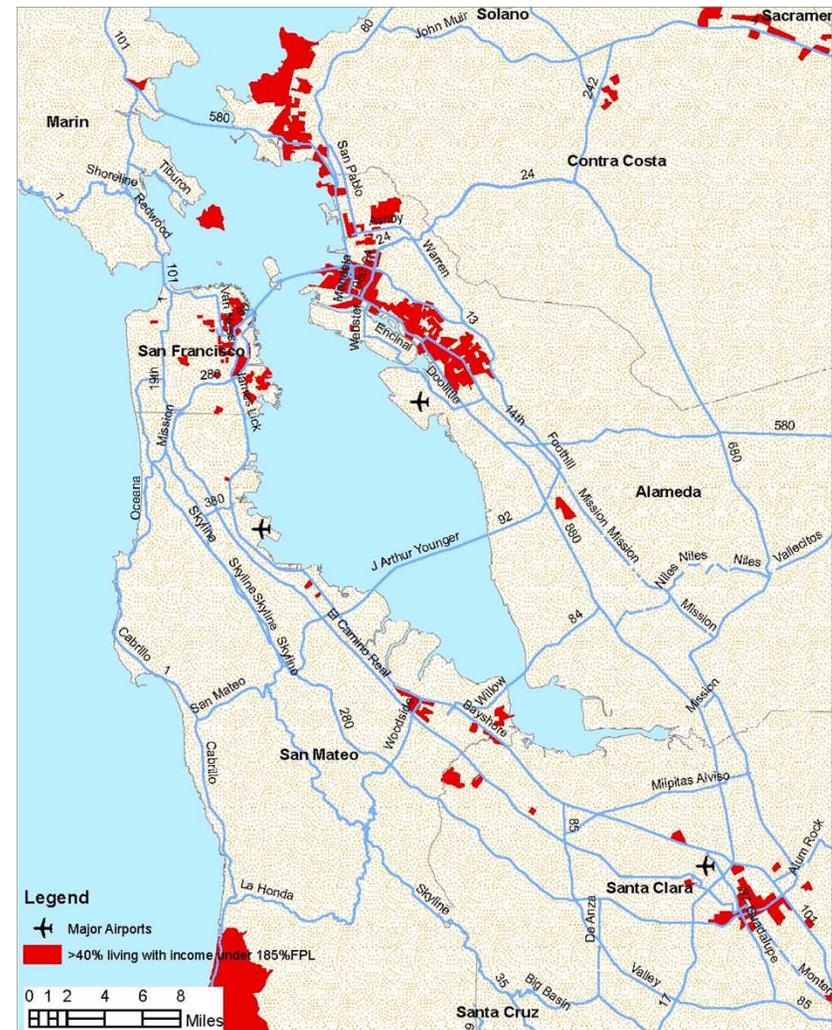


Demographic & Income Data

Population under 18

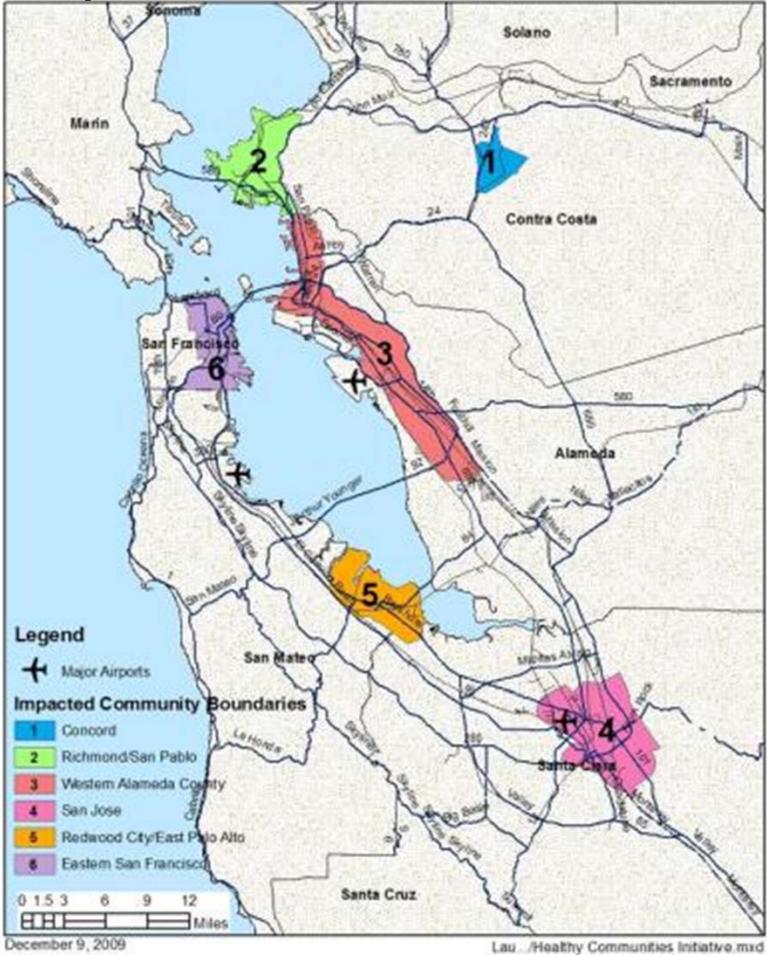


Low Income Level

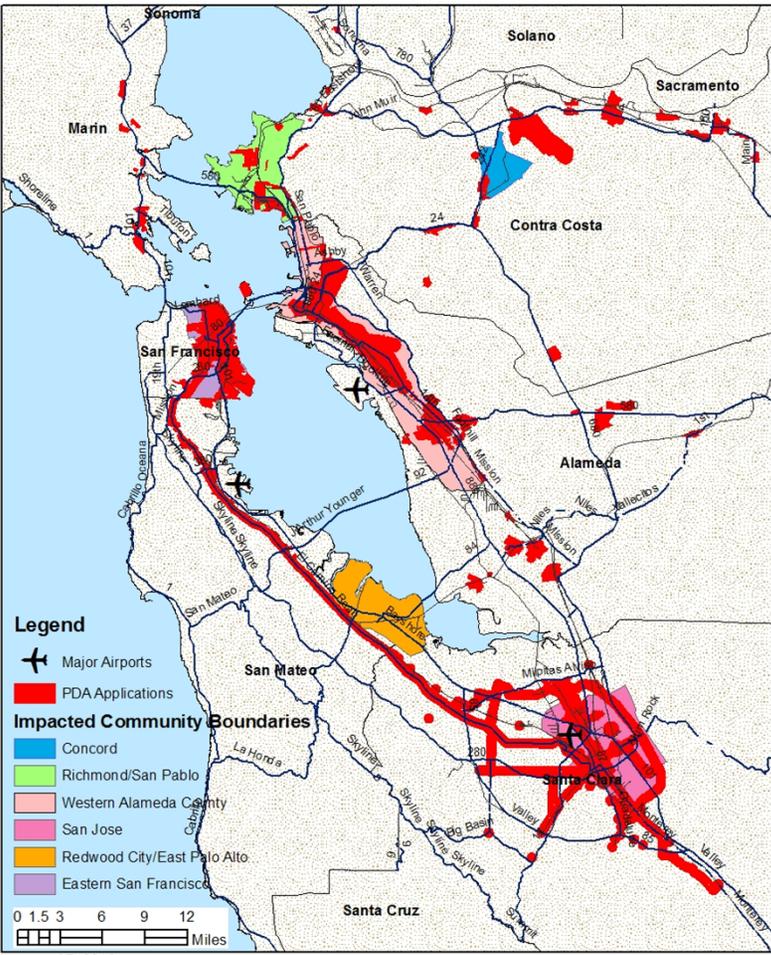


Current Impacts and Development Areas

Impacted Areas Identified

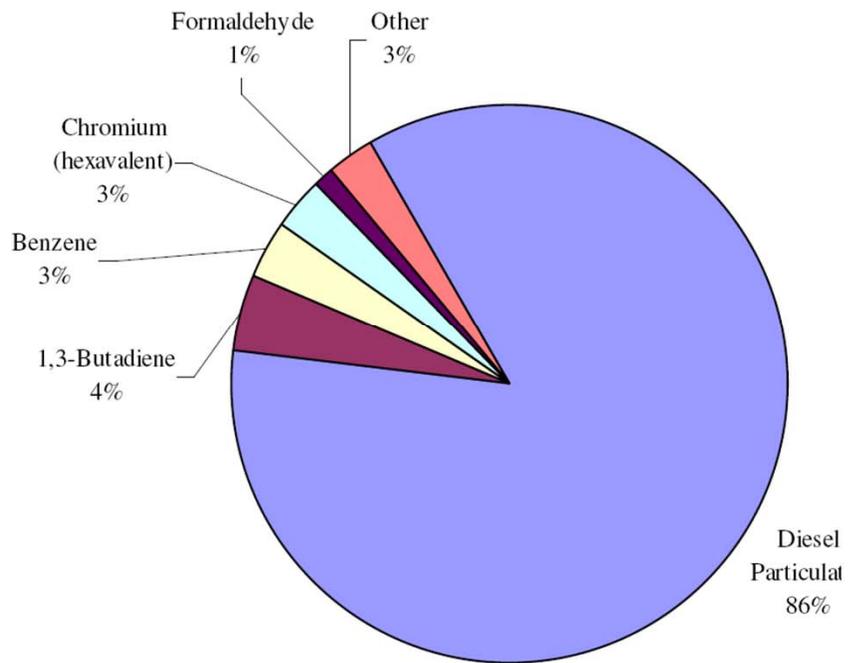


Priority Development Areas

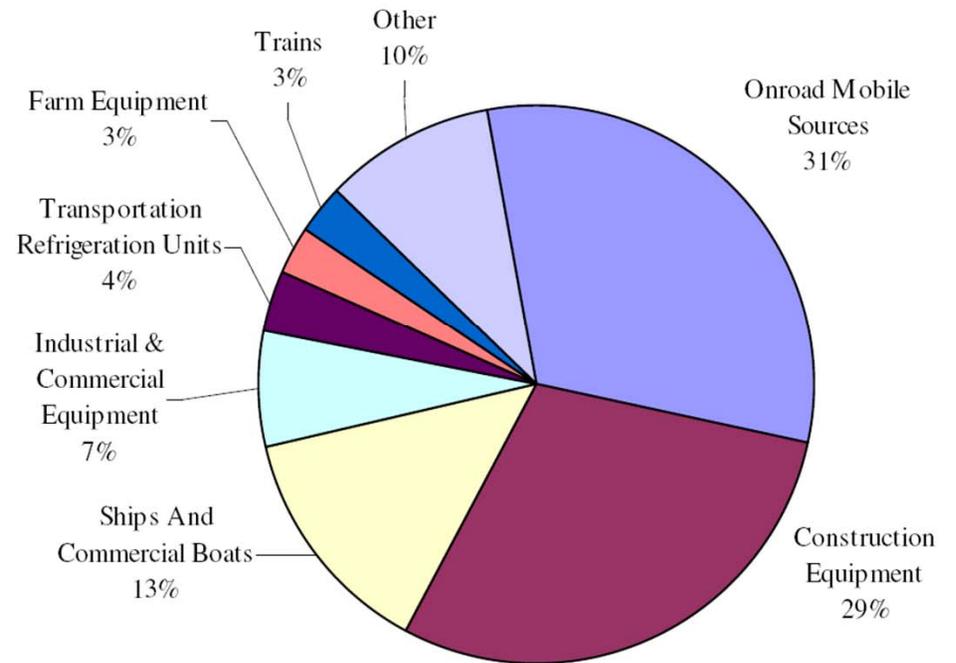


Sources and Types of Pollutants In the Bay Area

By Pollutant



By Source Category





Public Health Impacts of Local Risks and Hazards

- Health studies consistently show that living near highways has serious health consequences

- Children living near a busy highway more likely to develop asthma and wheezing, suffer increased asthma attacks.
- Exposure to traffic-related pollution, especially fine PM, significantly increases risk of heart attacks and premature death.
- Pregnant women exposed to high levels of pollution from cars and trucks are more likely to experience problems with baby's development, such as low birth weight.



- Pre-term and early childhood exposures to carcinogens are ten times more important than previously estimated
- Local land use decisions play an important role in determining exposure to air pollutants
 - CARB Air Quality and Land Use Handbook, 2005
 - San Francisco ordinance on air quality and infill development

Encourage Healthy Infill

Poor housing site



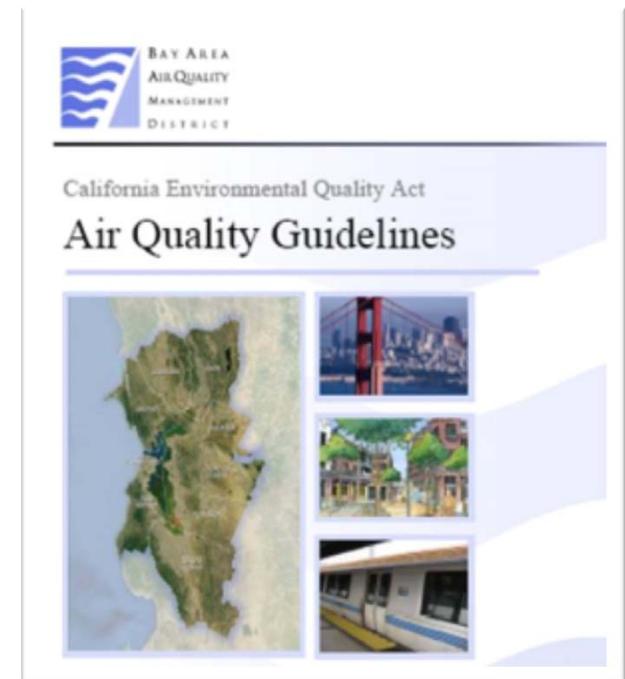
Good housing site





CEQA Updates

- Air District adopted updated CEQA Guidelines June 2010
- Provided risk, hazard, and PM2.5 thresholds for single source and cumulative exposures
 - Risk and hazards thresholds for new receptors to become effective May 2011
- Introduced Community Risk Reduction Plans (CRRPs) as option for CEQA compliance



Local Community Risks and Hazards Thresholds

<p>Single source (Source or Receptor*)</p>	<p>Compliance with Community Risk Reduction Plan OR</p> <ul style="list-style-type: none"> • Increased cancer risk >10.0 in a million • Increased non-cancer risk > 1.0 Hazard Index (Chronic or Acute) • Ambient PM_{2.5} increase: > 0.3 µg/m³ annual average <p><u>Zone of Influence</u>: 1,000-foot radius from proposed project</p>
<p>Cumulative (Source or Receptor*)</p>	<p>Compliance with Community Risk Reduction Plan OR</p> <ul style="list-style-type: none"> • Cancer: > 100 in a million (from all local sources) • Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) • PM_{2.5}: > 0.8 µg/m³ annual average (from all local sources) <p><u>Zone of Influence</u>: 1,000-foot radius from proposed project</p>

*Risk and hazards thresholds for new receptors to become effective May 2011

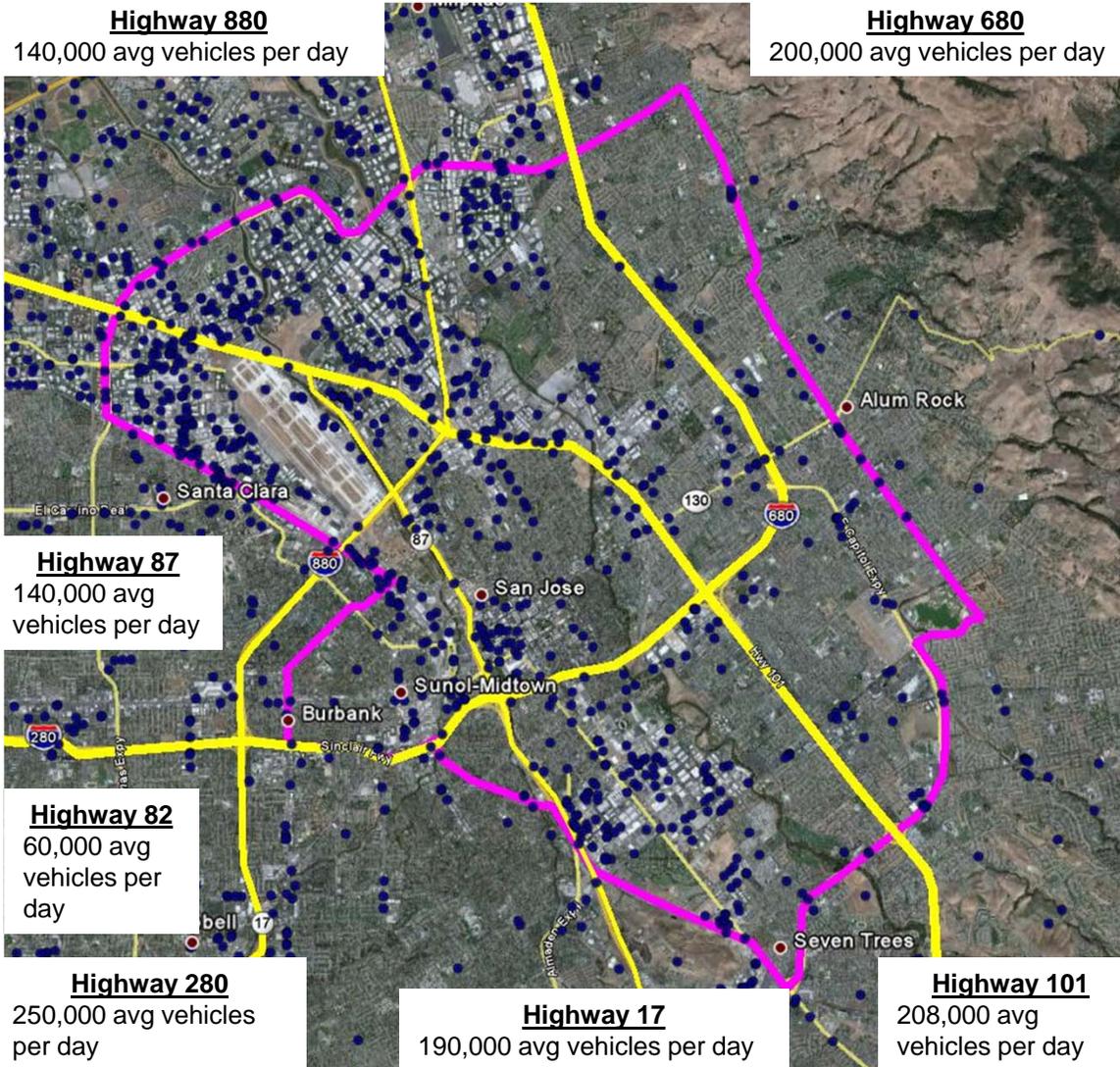
Community Risk Reduction Plans (CRRPs)

- Supports community-wide planning approach to reduce cumulative impacts of air pollution
- Promote strategies that support sustainable & livable communities
 - Support mixed-use, infill, transit-oriented development
- Streamline CEQA review for projects consistent with plan
- Invite public participation in setting goals for the community
- Collaborative effort between local governments & Air District
 - District provides funding to cities within the impacted areas
 - District provides technical expertise in developing emission inventories, air dispersion modeling, and mitigation strategies
- Pilot projects underway in San Jose, San Francisco

CRRP Elements

1. Define Planning Area
2. Develop Local-scale Emission Inventory
 - Permitted sources, freeways & major roadways, rail road lines, and non-permitted area sources (e.g., distribution centers, construction)
3. Develop Local-scale Risk/Hazards Modeling
4. Set Goal or Reduction Target
5. Establish Emission Reductions and Other Mitigation Measures
6. Set Monitoring and Updating Mechanism
7. Involve Public and Follow CEQA Process

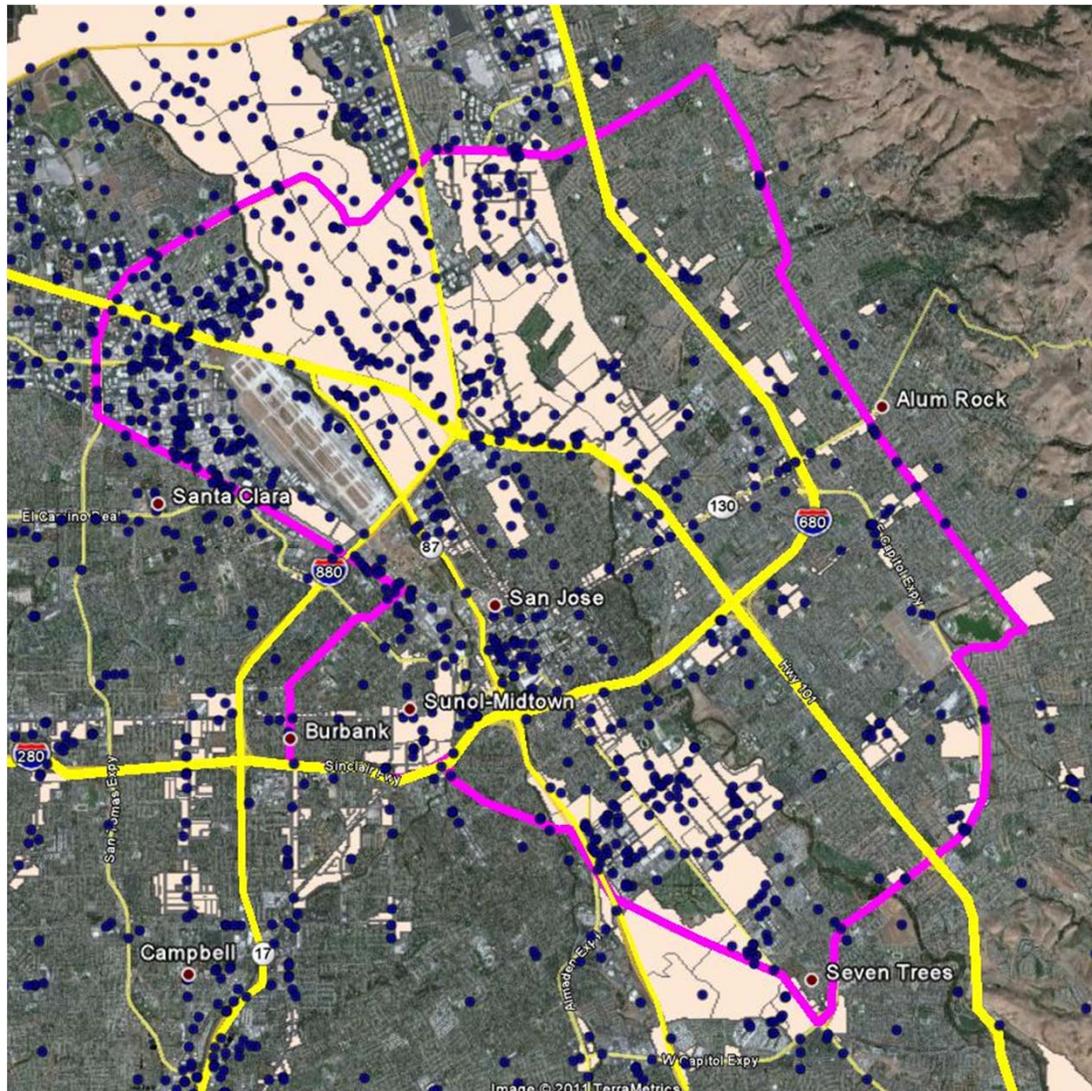
San Jose Community



LEGEND

- CARE Impacted Boundary
- Permitted Sources
- Freeways with >200,000 vehicles/day
- Freeways with <200,000 and >150,00 vehicles/day
- Freeways with <150,000 and >100,00 vehicles/day
- Freeways with <150,000 and >100,00 vehicles/day

San Jose Community



LEGEND

-  CARE Impacted Boundary
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-  Freeways with <150,000 and >100,00 vehicles/day
-  Proposed Residential/Mixed Land Use in General Plan

District's Role

- Develop emissions inventory and modeling parameters for:
 - Significant stationary sources
 - Mobile sources
- Complete air dispersion modeling analysis
- Identify areas exceeding thresholds
- Collaborate with San Jose to establish policies and mitigation strategies to reduce exposures

Example Draft Modeling from San Francisco



Risk Reduction Strategies

- Grant allocations to assist with mitigations & promote healthy infill
- Air District new or amended rules to reduce air pollution from stationary sources identified as posing health risks
- Indoor air quality filters and ventilation
- Building heights and air intakes
- Tree and vegetation buffers
- Construction equipment technologies
- Truck routes and idling limitations
- Railroad and harbor craft technologies
- Source specific setbacks for back-up generators, gas stations, etc.
- Land use and transportation planning to reduce vehicle emissions

Contact Information

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